

PAPERS READ BEFORE THE SOCIETY FROM MARCH 1893
TO JANUARY 1894.

1893.

- Mar. 10. Observations of *Saturn* in 1892. J. Guillaume.
Physical observations of *Mars*, made at the Allegheny
Observatory in 1892. J. E. Keeler.
On certain variable Stars having the appearance,
visually, of planetary nebulae. C. E. Peek.
Observations of *Mars* and *♃ Aquarii* near their conjunc-
tion on 1892 November 4. John Tebbutt.
Historical note on the parallel plate double-image
micrometer. J. H. Poynting.
Observations of the position-angle of the ring of *Saturn*.
A. Stanley Williams.
On the orbit of ξ 1728. J. E. Gore.
On the orbit of β 416. J. E. Gore.
Photograph of the nebula M. 77 *Ceti*. Isaac Roberts.
Photograph of the cluster M. 103 *Cassiopeiae*. Isaac
Roberts.
Photographs of Holmes' Comet (*f* 1892). Isaac Roberts.
Observations of Brooks' Comet (*g* 1892) and Holmes'
Comet (*f* 1892), made at the Royal Observatory,
Greenwich. Communicated by the Astronomer
Royal.
A micrometer for measuring the plates of the Astro-
photographic Chart. W. H. M. Christie.
- Apr. 14. Results of double star measures with the 8-inch Equa-
torial at Windsor, New South Wales, in 1892. John
Tebbutt.
Photograph of the cluster M. 34 *Persei*. Isaac Roberts.
Photograph of the nebula Π II. 240 *Pegasi*. Isaac
Roberts.
Comparison of the Greenwich Ten-Year Catalogue
(1880) with the Cape Catalogue (1880). H. H.
Turner and H. P. Hollis.
Revised places of Comets observed at the Royal
Observatory, Greenwich. Communicated by the
Astronomer Royal.
Telescopic Objectives for photographic purposes. H.
Dennis Taylor.

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- Apr. 14. Observations of Comets, made at the Liverpool Observatory, 1892-93. W. E. Plummer.
Galactic longitudes and latitudes of the brighter stars in a zone of the heavens containing the Milky Way. A. Marth.
On the parallactic inequality of the Earth's motion around the Sun. E. J. Stone.
Observations of the recent conjunction of *Saturn* and γ *Virginis*, made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
On the orbit of O Σ 285. J. E. Gore.
- May 12. The orbit of τ *Cygni* (A. G. C. 13). S. W. Burnham.
Photograph of the cluster M. 35 *Geminorum*. Isaac Roberts.
Photograph of the cluster M. 36 *Aurigæ*. Isaac Roberts.
Photograph of the cluster M. 37 *Aurigæ*. Isaac Roberts.
Photograph of the cluster M. 50 *Monocerotis*. Isaac Roberts.
Immersions and emersions of *Jupiter's* Satellite IV. Rev. S. J. Johnson.
Negatives of *Jupiter* made with the great telescope of the Lick Observatory during the opposition of 1892-93. Professors E. S. Holden, W. W. Campbell, and A. L. Colton.
Note on the determination of the Moon's mass. E. J. Stone.
Ephemeris for physical observations of *Jupiter*, 1893-94. A. Marth.
Observations of the planets *Mars* and *Ceres*, made at the Royal Observatory, Greenwich, about the time of their recent conjunction. Communicated by the Astronomer Royal.
- June 9. The motion of Σ 1819. S. W. Burnham.
The orbit of 40 *Eridani* = Σ 518. S. W. Burnham.
Observations of the satellites of *Saturn* in 1893. Rev. A. Freeman.
Observations of Comet 1892 *d* (Brooks), made at the Royal Observatory, Cape of Good Hope. Communicated by H. M. Astronomer.
Ephemeris of the fifth satellite of *Jupiter*, 1893. A. Marth.
Expression of the radius vector of the Moon's orbit as disturbed by the Sun to the fifth order of small quantities. E. J. Stone.
- Nov. 10. The orbit of *Sirius*. S. W. Burnham.
Probable errors of Greenwich observations of close circumpolar stars. T. Lewis.
Occultation of *Saturn*, 1893 May 25, observed at Sydney Observatory. Communicated by H. C. Russell.

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- Nov. 10. Results of micrometer comparisons of *Saturn* and γ^1 *Virginis*. John Tebbutt.
 Tables to facilitate the application of Gauss' method of computing secular variations. R. T. A. Innes.
 Observations of Comet Rordame-Quénisset (*b* 1893), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
 Data for computing the positions of the satellites of *Jupiter*, 1893-94. A. Marth.
 The orbit of α *Centauri*. T. J. J. See.
 On the reduction of measures of photographic plates. H. H. Turner.
 Observations of phenomena of *Jupiter's* satellites, made at Windsor, New South Wales, in the year 1892. John Tebbutt.
 Photograph of the nebula H I. 168 *Ursæ Majoris*. Isaac Roberts.
 Photograph of the nebula H I. 205 *Ursæ Majoris*. Isaac Roberts.
 Method of finding the latitudes of *Saturn's* belts. Rev. A. Freeman.
 Observations of conjunctions of satellite IV. with *Jupiter*. Rev. A. Freeman.
 Greenwich mean times of superior and inferior Geocentric Conjunctions of *Jupiter's* satellite *Callisto* for 1894 January to 1895 February. Communicated by the Superintendent of the *Nautical Almanac*.
 Observations of Brooks' Comet (*c* 1893), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
 The secondary colour aberrations of the refracting telescope in relation to vision. H. Dennis Taylor.
 Observations of Comet Rordame-Quénisset (*b* 1893), made at the Liverpool Observatory. W. E. Plummer.
 Observations of the Moon, made at the Radcliffe Observatory, Oxford, during the year 1892, and a comparison of the results with the tabular places from Hansen's *Lunar Tables*. E. J. Stone.
- Dec. 8. On the rotation of *Saturn*. A. S. Williams.
 Observations of double stars, made at the Sydney Observatory. Communicated by H. C. Russell.
 The orbit of γ *Andromedæ* (BC). S. W. Burnham.
 The variable spectrum of β *Lyræ* in the region F—*h*. Rev. W. Sidgreaves.
 Note on the spectra of certain red stars. Rev. T. E. Espin.
 Two new variable stars. Rev. T. E. Espin.
 The periodic variation in the motion of 61 *Cygni*. H. Jacoby.

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Dec. 8. Windsor measures of *a Centauri* in 1893. John Tebbutt.
To adjust the polar axis of an equatorial telescope for photographic purposes. Dr. A. A. Rambaut.
Observations of the variable stars W and X *Sagittarii*. Lieutenant-Colonel E. E. Markwick.
Observations of Brooks' Comet (c 1893), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
Note on a Star-Correction Facilitator, or an instrument for readily obtaining the products of pairs of numbers, one number being taken from one set (*e.g.* day-constants), and the second from another set (*e.g.* star-constants). T. C. Hudson.
On errors that may arise in estimating star magnitudes by photography. Captain W. de W. Abney.
1894.
Jan. 12. On the dark poles and bright equatorial belt of the first satellite of *Jupiter*. E. E. Barnard.
Photograph of the nebulae H I. 56 and 57 *Leonis*. Isaac Roberts.
Photograph of the nebula H I. 200 *Leonis min.* Isaac Roberts.
Observations of occultations of stars by the Moon and of phenomena of *Jupiter's* satellites, made in the year 1893 at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
Observations of Brooks' Comet (c 1893), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
Mean areas and heliographic latitudes of Sun-spots deduced from photographs taken at the Royal Observatory, Greenwich, at Dehra Dûn (India), and in Mauritius, in the year 1891. Communicated by the Astronomer Royal.
On the spectra of certain stars (II.). Rev. T. E. Espin.
Some nebulous objects not in the New General Catalogue of Nebulae. Rev. T. E. Espin.
Influence of the Full Moon on the weather. Rev. S. J. Johnson.
Ephemerides of the five inner satellites of *Saturn*, 1894. A. Marth.
Ephemeris of the satellites of *Uranus*, 1894. A. Marth.
Note on the transit of *Mercury* over the Sun's disc, which takes place for *Venus* on March 21, 1894; and on the transits of *Venus* and *Mercury* which occur for *Saturn's* system on the same day. A. Marth.

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